



### Chemistry - IAL EdExcel

Approximate available lessons based on 5 lessons per week over 37 week year; assuming approximately 16 lessons missed for holidays/other subject activities/PSHE/exams

Exact curriculum timings are approximate due to holidays/ other subject trips and activities / PHSE / internal examinations

All topics across KS5 will have ongoing formative assessment including:

- Questioning techniques
- Peer/self-marking and assessments
- Written exercises
- Presentations
- Class activities
- Practical work

All topics will have some form of summative assessment to test the knowledge and skills covered within the topic. These will take the forms of:

- End of topic tests
- Scientific Investigations

All topics will include practical work to ensure that the links between practical and theory are encouraged and emphasised.

	<b>Year 12 Chemistry</b>	<b>Year 13 Chemistry</b>
<b>Topic and Content</b>	<p><b>T1 &amp; T2: Unit 1</b>  <b>Atomic Structure</b>  <b>Bonding and Structure</b>  <b>Introduction to Organic Chemistry</b>  <b>Alkanes</b>  <b>Alkenes</b>  <b>Practical Skills in Chemistry I</b></p> <p><b>T3: Units 2 &amp; 3</b>  <b>Intermolecular Forces</b>  <b>Redox and Group chemistry</b>  <b>Halogenoalkanes, Alcohols and Spectra</b>  <b>Physical Chemistry</b>  <b>Practical Skills in Chemistry I</b></p> <p><b>T4: AS Exams Preparation</b>  <b>Kinetics (Unit 4, after AS exams)</b></p>	<p><b>T1 &amp; T2: Unit 4</b>  <b>Kinetics (continued)</b>  <b>Entropy and Energetics</b>  <b>Chemical Equilibria</b>  <b>Acid-base equilibria</b>  <b>Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality</b>  <b>Spectroscopy and Chromatography</b>  <b>Practical Skills in Chemistry II</b></p> <p><b>T3: Units 5 &amp; 6</b>  <b>Redox Equilibria</b>  <b>Transition Metals and their Chemistry</b>  <b>Organic Chemistry: Arenes</b>  <b>Organic Nitrogen Compounds</b>  <b>Organic Synthesis</b>  <b>Practical Skills in Chemistry II</b></p> <p><b>T4: Exam preparation</b></p>

<b>Assessment Objectives and Weightings</b>			<b>% in IAS</b>	<b>% in IA2</b>	<b>% in IAL</b>
	<b>A01</b>	Demonstrate knowledge and understanding of science.	34–36	29–31	32–34
	<b>A02</b>	(a) Application of knowledge and understanding of science in familiar and unfamiliar contexts.	34–36	33–36	33–36
		(b) Analysis and evaluation of scientific information to make judgements and reach conclusions.	9–11	14–16	11–14
<b>A03</b>	Experimental skills in science, including analysis and evaluation of data and methods.	20	20	20	
<b>Method of Summative Assessment</b>	Projects Investigations End of Topic Tests Public Examinations in Jan (Unit 1) and June (Units 2 and 3)	Projects Investigations End of Topic Tests Public Examinations in Jan (Unit 4) and June (units 5 and 6)			